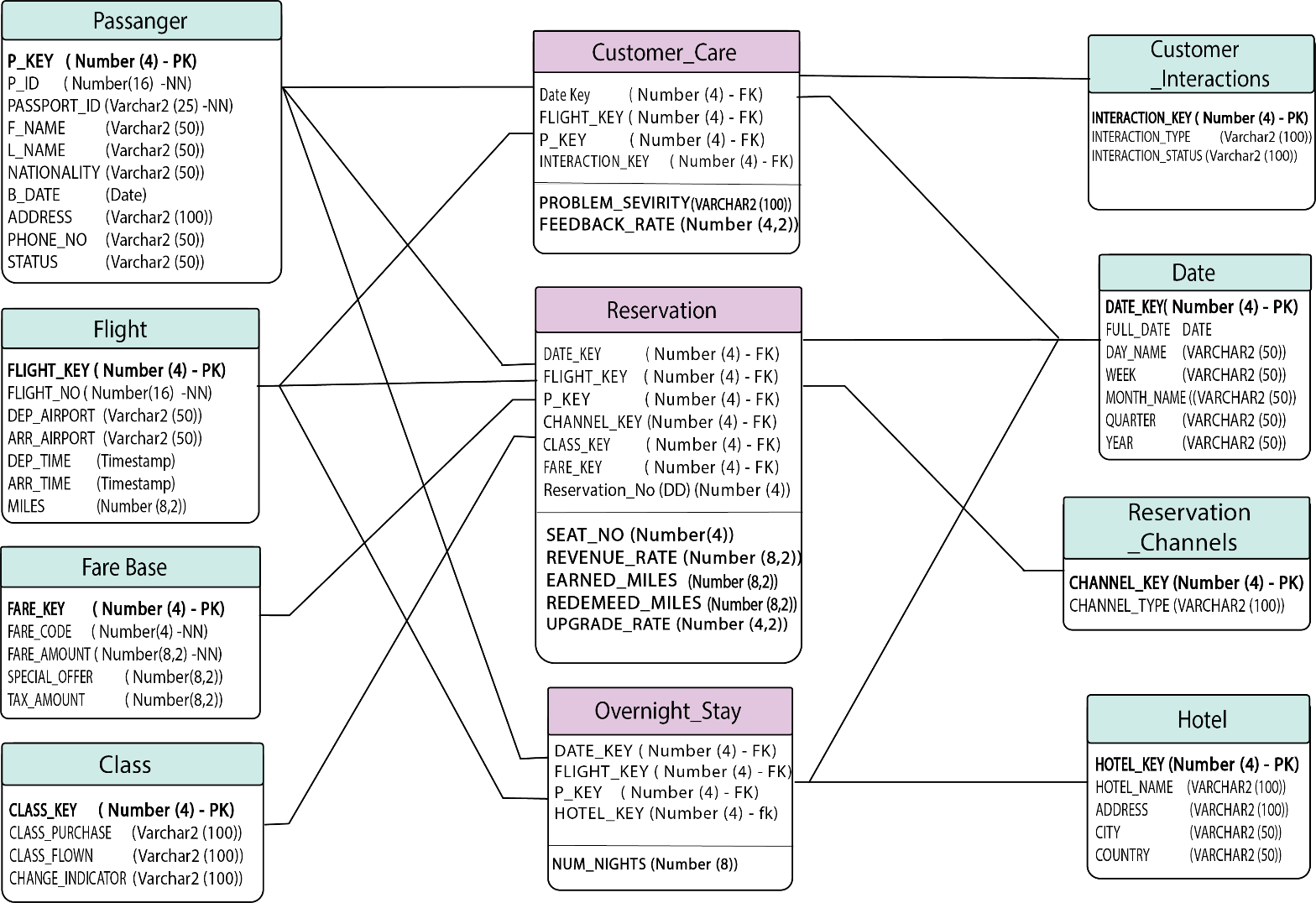
Physical Model



Dimension Tables:

CREATE TABLE passenger

(

P\_Key NUMBER (4) CONSTRAINT passenger\_PK PRIMARY KEY,

p\_id NUMBER (16) NOT NULL,

passport\_id VARCHAR2 (25) NOT NULL,

f\_name VARCHAR2 (50),

l\_name VARCHAR2 (50),

nationality VARCHAR2 (50),

b\_date DATE,

address VARCHAR2 (100),

phone\_no VARCHAR2 (50),

status VARCHAR (50)

);

CREATE TABLE flight

(

flight\_Key NUMBER (4) CONSTRAINT flight\_PK PRIMARY KEY,

flight\_no NUMBER (16) NOT NULL,

dep\_airport VARCHAR2 (50),

arr\_airport VARCHAR2 (50),

dep\_time TIMESTAMP,

arr\_time TIMESTAMP,

miles NUMBER (8, 2)

);

CREATE TABLE fare\_base

(

fare\_Key NUMBER (4) CONSTRAINT fare\_PK PRIMARY KEY,

fare\_code NUMBER (4) NOT NULL,

fare\_amount NUMBER (8, 2) NOT NULL,

special\_offer NUMBER (8, 2),

Tax\_amount NUMBER (8, 2)

);

CREATE TABLE class

(

class\_Key NUMBER (4) CONSTRAINT class\_PK PRIMARY KEY,

class\_purchase VARCHAR2 (100),

class\_flown VARCHAR2 (100),

change\_indicator VARCHAR2 (100)

);

CREATE TABLE customer\_interactions

(

interactions\_Key NUMBER (4) CONSTRAINT interactionsr\_PK PRIMARY KEY,

interactions\_type VARCHAR2 (100),

interactions\_status VARCHAR2 (100)

);

CREATE TABLE hotel

(

hotel\_Key NUMBER (4) CONSTRAINT hotel\_PK PRIMARY KEY,

hotel\_name VARCHAR2 (100),

address VARCHAR2 (100),

city VARCHAR2 (50),

country VARCHAR2 (50)

);

CREATE TABLE reservation\_channels

(

channel\_Key NUMBER (4) CONSTRAINT channel\_PK PRIMARY KEY,

channel\_type VARCHAR2 (100)

);

CREATE TABLE date\_dimension

(

date\_Key NUMBER (4) CONSTRAINT date\_PK PRIMARY KEY,

full\_Date DATE,

day\_name VARCHAR2 (50),

week VARCHAR2 (50),

month\_name VARCHAR2 (50),

quarter VARCHAR2 (50),

year VARCHAR2 (50)

);

Fact Tables:

CREATE TABLE customer\_care

(

date\_key NUMBER (4),

flight\_key NUMBER (4),

p\_Key NUMBER (4),

interactions\_Key NUMBER (4),

problem\_severity VARCHAR2 (100),

feedback\_rate NUMBER (4,2),

CONSTRAINT date\_fk\_cst FOREIGN KEY (date\_key)

REFERENCES date\_dimension (date\_Key),

CONSTRAINT date\_fk\_flight FOREIGN KEY (flight\_key)

REFERENCES flight (flight\_key),

CONSTRAINT date\_fk\_pass FOREIGN KEY (p\_Key)

REFERENCES passenger (p\_Key),

CONSTRAINT date\_fk\_inter FOREIGN KEY (interactions\_Key)

REFERENCES customer\_interactions (interactions\_Key)

);

CREATE TABLE overnight\_stay

(

date\_key NUMBER (4),

flight\_key NUMBER (4),

p\_Key NUMBER (4),

hotel\_Key NUMBER (4),

num\_nights NUMBER (8),

CONSTRAINT overnight\_fk\_cst FOREIGN KEY (date\_key)

REFERENCES date\_dimension (date\_Key),

CONSTRAINT overnight\_fk\_flight FOREIGN KEY (flight\_key)

REFERENCES flight (flight\_key),

CONSTRAINT overnight\_fk\_pass FOREIGN KEY (p\_Key)

REFERENCES passenger (p\_Key),

CONSTRAINT overnight\_fk\_hotel FOREIGN KEY (hotel\_Key)

REFERENCES hotel (hotel\_Key)

);

CREATE TABLE reservation

(

date\_key NUMBER (4),

flight\_key NUMBER (4),

p\_Key NUMBER (4),

channel\_Key NUMBER (4),

class\_Key NUMBER (4),

fare\_Key NUMBER (4),

reservation\_no NUMBER (4),

seat\_no NUMBER (4),

revenue\_rate NUMBER (8,2),

earned\_miles NUMBER (8,2),

redeemed\_miles NUMBER (8,2),

upgrade\_rate NUMBER (4,2),

CONSTRAINT reservation\_fk\_cst FOREIGN KEY (date\_key)

REFERENCES date\_dimension (date\_Key),

CONSTRAINT reservation\_fk\_flight FOREIGN KEY (flight\_key)

REFERENCES flight (flight\_key),

CONSTRAINT reservation\_fk\_pass FOREIGN KEY (p\_Key)

REFERENCES passenger (p\_Key),

CONSTRAINT reservation\_fk\_channel FOREIGN KEY (channel\_Key)

REFERENCES reservation\_channels (channel\_Key),

CONSTRAINT reservation\_fk\_class FOREIGN KEY (class\_Key)

REFERENCES class (class\_Key),

CONSTRAINT reservation\_fk\_fare FOREIGN KEY (fare\_Key)

REFERENCES fare\_base (fare\_Key)

);